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DATE MAILED: 12/28/2004

APPLICATION NO. FILING DATE ATTORNEY DOCKET NO. CONFIRMATION NO. FIRST NAMED INVENTOR 09/655,659 09/06/2000 Alex Radulovic 15095.3 22913 7590 12/28/2004 **EXAMINER** WORKMAN NYDEGGER (F/K/A WORKMAN NYDEGGER & FERRIS, DERRICK W ART UNIT PAPER NUMBER **60 EAST SOUTH TEMPLE** 1000 EAGLE GATE TOWER 2663 SALT LAKE CITY, UT 84111

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	
Office Action Summary		09/655,659	RADULOVIC, ALEX	
		Examiner	Art Unit	
		Derrick W. Ferris	2663	
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).				
Status				
1)⊠	Responsive to communication(s) filed on 17 Ju	<u>ıne 2004</u> .		
2a)⊠	This action is FINAL . 2b) This	action is non-final.		
3)[3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.			
Disposition of Claims				
4)⊠ 5)□ 6)⊠	Claim(s) 1-16 and 18-27 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. Claim(s) is/are allowed. Claim(s) 1-16 and 18-27 is/are rejected. Claim(s) is/are objected to.			
Application Papers				
 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on <u>06 September 2000</u> is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. 				
Priority under 35 U.S.C. § 119				
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 				
A440.a.b	Wa)			
Attachmen 1) Notic	t(s) e of References Cited (PTO-892)	4) Interview Summary	(PTO_413)	
2) 🔲 Notic	e of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ite	
	nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	5) Notice of Informal Pa	atent Application (PTO-152)	

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DETAILED ACTION

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Response to Amendment

- 1. Claims 1-16, 18-27 as amended are still in consideration for this application. Applicant has amended claims 1, 15, 18, and 19. Applicant has canceled claim 17. Applicant has added no claims.
- 2. With respect to priority, applicant is correct in that the granting of priority for claim 24 is not clear in the Office action. As such, applicant should **not** receive priority for any of the claims including claim 24. In particular, claim 24 recites a global private packetized communication system with a control path and a real time data path in the preamble. As pointed out by the examiner in the previous Office action, applicant's figure 2 shows the newly claimed subject matter as part of the app center 100 (i.e., inside the dashed lines) which includes the control and real-time data paths such that claim 24 should not received priority since the limitation falls inside the dashed lines (i.e., the IMCP as defined in applicant's specification at e.g., page 18, line 6). In particular, the above limitation at issue was not found in applicant's parent cases U.S. patent application 08/585,628 filed 01/16/1996 titled "Voice Internet Transmission System" (see WO 97/29581) and U.S. patent application 08/599,238 filed 02/09/1996 titled "Facsimile Internet Transmission System" (see WO 97/26753) to C-I-P application 09/655,659 titled "Private IP communications network architecture". Specifically, figure 7 of 08/585,628 does not clearly teach the above limitation at issues on pages 20-21 since the reference is not clear that there are two distinct or dedicated channels, one for data and one for control information (see e.g., applicant's claim 7).
- 3. Examiner withdraws the 112-first paragraph rejection(s) for Office action filed 12/17/03.

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4. Examiner withdraws the 112-second paragraph rejection(s) for Office action filed 12/17/03. Examiner notes the rejection was proper and as a result thanks applicant for making the necessary corrections to clarify the recited claimed subject matter and thus withdraws the rejection.

5. Examiner does **not withdraw** the obviousness rejection to *Korpi* in view of *Thom* (or corresponding rejections) for Office action filed 12/17/2003. In addressing applicant's arguments in the response filed 06/17/2004, applicant argues the amended limitation that a central arbitration server initiates a service layer to supply requested service. Applicant claims that a H.323 gatekeeper does not initiate a service layer. Examiner respectfully disagrees.

Applicant teaches in their specification the following: "in terms of H.323, CE 50 is among other things a digital gateway and CAS 40 is a gatekeeper", see top of page 17. As such, both *Korpi* and *Thom* discloses an H.323 gateway and gatekeeper. Examiner thanks applicant for attempting to discriminate their invention from H.323, however, the examiner still found the discriminating factor taught by the references. In particular, applicant attempts to further clarify in their arguments that an H.323 is a peer-to-peer model and does not require any processing by a gatekeeper. Thus a gatekeeper neither performs centralized arbitration or service requests nor grants resources – it does not process service request signaling and does not possess sufficient network intelligence to initiate a service layer to supply a requested service. Examiner respectfully disagrees. In particular, an H.323 gatekeeper *routes* calls to their destination (i.e., there are two models as taught by *Thom* at e.g., top left-hand column of page 55 and not just a peer-to-peer model as mentioned by applicant). In addition, an H.323 gatekeeper also provides admission control. An H.323 gatekeeper also performs accounting (i.e., billing). In particular,

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see left-hand column on page 118 of *Korpi*. Also see page 54, right-hand column of *Thom*. Thus *Korpi* teaches the above features of centralized arbitration of service requests, grants resources, and has sufficient network intelligence to initiate a service layer to supply a request. Hence when granting a call, see e.g., right-hand column of *Thom*, the gatekeeper teaches the further step of a central arbitration server initiating a service layer to supply the requested service. *Thom* further teaches that the gatekeeper has the further power to limit the bandwidth for the call. Examiner would like to point out that the further limitation of the CAS allowing for extensible CDR is not recited in the claims which is the support applicant provides for the above limitation found e.g., at page 24, lines 3-16 of applicant's specification. As such, the rejection is maintained for the claims as necessitated by amendment.

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 1-4, 6, 9-13, 16, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Supplementary Services in the H.323 IP Telephony Network" to Korpi et al. ("Korpi") in view of "H.323: The Multimedia Communications Standard for Local Area Networks" to Thom.

As to **claim 1**, *Korpi* discloses a control path connection on a network layer between individual components attached to the dispersed networks (e.g., applicant's CE 50) and at least one central arbitration server (e.g., applicant's CAS 40) as shown in

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figure 1 on page 119. In particular, a fax/voice gateway is an example of an individual component (i.e., applicant's CE 50) and Gatekeeper Y/Router is an example of a central arbitration server (i.e., in reference to applicant's specification on page 17, lines 1-2). In addition, a step of initiating a data path connection between the individual components designated by the service request is also shown in figure 1. Also shown in the figure is a further step of receiving a "service request" using a reasonable but broad interpretation of "service request". In addition, as H.323 runs on top of IP examiner notes IP as a network layer.

Korpi is silent or deficient to the further limitation of the step initiating a service level layer to supply the requested service.

Thom teaches the above-mentioned further limitation in figure 4 on page 55.

Examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the further limitation of the step initiating a service level layer to supply the requested service. In particular, the *Korpi* reference would be modified to disclose initiating a service layer request based on the gatekeeper as shown in figure 4. The suggestion or motivation for doing so would have been obvious since both reference disclose setting up a call signal in general, and for H.323 in particular.

As to claim 2, see e.g., at least page 118 left-hand column of Korpi.

As to **claim 3**, see e.g., at least page 118 left-hand column with respect to gatekeeper of *Korpi*.

As to claim 4, see e.g., page 124, right-hand column.

As to claim 6, see e.g., figure 4 on page 55 of *Thom*.

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As to claims 9-11, see e.g., figure 4 on page 55 of Thom.

As to claim 12, see e.g., figure 5 on page 55 of Thom.

As to claim 13, see e.g., figure 5 on page 55 of *Thom* and left-hand column of page 119 of *Korpi*.

As to claim 16, see e.g., figure 1 on page 119 of Korpi.

As to claim 21, see e.g., figure 4 on page 55 of *Thom*.

As to claim 22, see e.g., figure 1 on page 119 of Korpi.

As to claim 23, see e.g., figure 4 on page 55 of *Thom*.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over "Supplementary Services in the H.323 IP Telephony Network" to *Korpi et al.* ("*Korpi*") in view of "H.323: The Multimedia Communications Standard for Local Area Networks" to *Thom* and in further view of U.S. Patent No. 6,529,499 B1 to *Doshi et al.* ("*Doshi*") and U.S. Patent No. 6,504,838 B1 to *Kwan*.

As to claim 5, for types of data see e.g., page 52, left-hand column of *Thom*; and page 118, left-hand column of *Korpi*. *Korpi* and *Thom* are silent to the further limitation of modem data and silence/background noises. Examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include modem data and silence/background noises. In particular, one skilled in the art would be motivated to include modem data and silence/background noises as part of transporting voice in general since voice contains periods of silence and background noises, and modem data is transported over a voice (PSTN) link. (Examiner notes applicant only claims and supports that such information is possible to transport on a data path.) As such, *Doshi*

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cures the above-cited deficiency by disclosing that it is possible to transport silence/background information over an H.323/SIP network (e.g., see column 3, lines 1-42). As such, *Kwan* cures the above-cited deficiency by disclosing that it is possible to transport modem information over an H.323 network (e.g., figure 5; column 10, lines 5-24).

9. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Supplementary Services in the H.323 IP Telephony Network" to *Korpi et al.* ("*Korpi*") in view of "H.323: The Multimedia Communications Standard for Local Area Networks" to *Thom* and in further view of U.S. Patent No. 6,519,249 B1 to *Bennefeld et al.* ("*Bennefeld*").

As to **claim 7**, *Korpi* and *Thom* are silent to the further limitation of recoding and monitoring the call control messages (i.e., billing information). Although *Korpi* does disclose that the gatekeeper supports accounting (e.g., see left-hand column on page 118), *Korpi* may be silent to monitoring and storing the call control messages. Examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include recoding and monitoring the call control messages. In particular, one skilled in the art would be motivated to record and monitor call detail records for the purpose of generating revenue for data on a network. As such, *Bennefeld* cures the above-cited deficiency by disclosing recording and monitoring billing information. In particular, *Bennefeld* discloses monitoring and recording with respect to a gatekeeper on an H.323 network (e.g., see at least column 1, lines 60-67).

As to **claim 8**, *Korpi* and *Thom* are silent to the further limitation of optimizing routing resources using at least, least cost routing, failure bypass, load balancing, and

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class or service. In particular, *Thom* teaches that QoS is generally not supported in H.323 (e.g., see page 56, left-hand column). Examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to optimize routing resources using at least, least cost routing, failure bypass, load balancing, and class or service. In particular, one skilled in the art would be motivated to optimize a route based on the dynamic environment of a network. As such, *Bennefeld* cures the above-cited deficiency by disclosing that routes can be optimized by at least load balancing for a dynamic network (e.g., see at least column 1, lines 60-67; column 3, lines 12-26).

10. Claims 14, 20, 24, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Supplementary Services in the H.323 IP Telephony Network" to *Korpi et al.* ("*Korpi*") in view of "H.323: The Multimedia Communications Standard for Local Area Networks" to *Thom* and in further view of U.S. Patent Application 2001/0046234 A1 to *Agrawal et al.* ("*Agrawal*") and "RFC 2806 – URLS for Telephone Calls" to *Vaha-Sipila*.

As to claim 14 Korpi and Thom are silent to the further limitation of using a (text) label. In particular, since Korpi and Thom teach using H.323, Korpi and Thom teach using binary encoding instead of a (text) label (e.g., see figure 1 of Agrawal). Examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to use labels since labels are supported for a SIP protocol. In particular, one would be motivated to use labels to communicate with at least a SIP network since a SIP protocol communicates using text labels. As support and motivation, Agrawal discloses using labels. In particular, as shown in figure 5 an IWF 100 function is capable of operating over both SIP and H.323. Thus both properties of SIP and H.323 are further

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taught by the reference (e.g., the reference teaches using both binary for H.323 and text labels for SIP when communicating to a gatekeeper/server). As an additional reference, *Vaha-Sipila* further builds on the concept by disclosing specific labels for a SIP network including telephone, fax, and voice information. Thus *Vaha-Sipila* further teaches the limitation of varying a call detail record based in part upon the data type (text) label.

As to **claim 20**, see similar rejection to claim 14 where examiner notes a reasonable but broad interpretation of IMCP to be either SIP or H.323 (i.e., applicant does not claim specific attributes of IMCP such as a text label running on top of or at a network layer).

As to claims 24 and 26, see e.g., the combined reasoning for the rejections for claims 1 and 14.

As to claims 27, see figure 1 of Korpi.

11. Claims 15, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Supplementary Services in the H.323 IP Telephony Network" to *Korpi et al.* ("*Korpi*") in view of "H.323: The Multimedia Communications Standard for Local Area Networks" to *Thom* and in further view of "C6x Solutions for Voice over IP Gateway" to *Cassing*.

As to **claim 15**, *Korpi* and *Thom* are silent to the further limitation using a digital signal processor on receiving signals to generate encoded signals at the gateway for a control path. In particular, *Thom* discloses translating call signaling but is silent or deficient to using a DSP (e.g., see page 54, left-hand column). Examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to use a digital signal processor on receiving signals to generate encoded signals at the gateway

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for a control path. One skilled in the art would be motivated to use a DSP in the gateway for voice compression such as G.723.1. *Cassing* cures the above-cited deficiency by disclosing a DSP in a VoIP gateway such as an H.323 gateway (e.g., see page 76 Section 3.1). Thus *Cassing* provides support and motivation for using a digital signal processor on receiving signals to generate encoded signals at the gateway for a control path.

As to claims 18 and 19, see figure 1 of Korpi.

12. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over "Supplementary Services in the H.323 IP Telephony Network" to *Korpi et al.* ("*Korpi*") in view of "H.323: The Multimedia Communications Standard for Local Area Networks" to *Thom* and in further view of U.S. Patent Application 2001/0046234 A1 to *Agrawal et al.* ("*Agrawal*"), "RFC 2806 – URLS for Telephone Calls" to *Vaha-Sipila*, and U.S. Patent No. 5,471,470A to *Sharma et al.* ("*Sharma*").

As to claim 25, Korpi, Thom, Agrawal, and Vaha-Sipila are silent to the further limitation of the specific structure of a telephone which includes at least a speaker and a microphone. Examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to use a telephone which includes at least a speaker and a microphone. In particular, one skilled in the art would be motivated to use a microphone to talk into a telephone and use a speaker to listen to an incoming call as is known in the art. Sharma provides further support and motivation by disclosing in figure 3 a telephone (shown as 20 in figure 1) that has at least a microphone 303 and speaker 304 (e.g., see column 8).

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Conclusion .

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (571) 272-3123. The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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> Derrick W. Ferris Examiner Art Unit 2663

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